IN THE UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

SEVEN NETWORKS, LLC
 	
        Plaintiff,
v.
 	
APPLE INC.
 	
        Defendant.
	Civil Action No. 2:19-cv-115-JRG
	
	JURY TRIAL REQUESTED

APPLE INC.'S RESPONSIVE CLAIM CONSTRUCTION BRIEF

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Page(s)

Cases

Statutes

TABLE OF EXHIBITS AND CITATIONS

Exhibits to Defendant's Responsive Claim Construction Brief (Cited as "Ex.__")	
Exhibit 1	U.S. Patent App. No. 14/873,143 Office Action Resp. (March 3, 2016) ("Mar. 3, 2016 Office Action Resp.")
Exhibit 2	U.S. Patent App. No. 14/873,143 Notice of Allowability (June 14, 2016) ("June 14, 2016 Notice Allowability")
Exhibit 3	U.S. Patent App. No. 14/873,143 Examiner Initiated Interview Summary (June 6, 2016) ("June 6, 2016 Interview Summ.")
Exhibit 4	Excerpts from the Deposition of Mark T. Jones, Ph.D. (Jan. 9, 2020) ("Jones Dep. Tr.")
Exhibit 5	U.S. Patent App. No. 14/583,726 Office Action Summary (Apr. 1, 2016) ("Apr. 1, 2016 Non-Final Rej.")
Exhibit 6	U.S. Patent App. No. 14/583,726 Amendments to the Claims (Apr. 16, 2016) ("Apr. 16, 2016 Amend.")
Exhibit 7	*Samsung Elecs. Co., Ltd. v. SEVEN Networks, LLC*, Case No. IPR2018-01108, Petition for *Inter Partes* Review of U.S. Patent No. 9,516,127 (Dec. 6, 2016) ("IPR2018-01108 Pet.")
Exhibit 8	U.S. Pat. App. No. 2012/0260118 ("Jiang")
Exhibit 9	*Samsung Elecs. Co., Ltd. v. SEVEN Networks, LLC*, Case No. IPR2018-01108, Patent Owner SEVEN Networks, LLC's Preliminary Response to Petition for *Inter Partes* Review of U.S. Patent No. 9,516,127 (Sept. 13, 2018) ("IPR2018-01108 Pat. Owner Prelim. Resp.")
Exhibit 10	*Samsung Elecs. Co., Ltd. v. SEVEN Networks, LLC*, Case No. IPR2018-01108, Public Version Decision Institution of *Inter Partes* Review (Jan. 14, 2019) ("IPR2018-01108 Institution Decision")
Exhibit 11	Excerpts from the Deposition of Michael T. Goodrich, Ph.D. (Jan. 15, 2020) ("Goodrich Dep. Tr.")
Exhibit 12	Excerpts of U.S. Provisional Pat. App. No. 60/346,881 (Jan. 8, 2002) ("Excerpts of '881 Prov. App.")
Exhibit 13	U.S. Patent No. 9,344,393 ("'393 patent")
Exhibit 14	U.S. Patent App. No. 14/609,189 Response to Final Office Action (Aug. 1, 2017) ("Aug. 1, 2017 Resp. to Office Action")`
Exhibit 15	U.S. Patent App. No. 14/609,189 Office Action Summary (Nov. 3, 2017) ("Nov. 3, 2017 Non-Final Rej.")
Exhibit 16	U.S. Patent App. No. 14/609,189 Arguments Presented for Pre-Appeal Brief Request for Review (Feb. 5, 2018) ("Feb. 5, 2018 Pre-Appeal Br.")
Exhibit 17	Excerpts of U.S. Pat. App. No. 13/188,553 (Jul. 22, 2011) ("'553 App.")
Exhibit 18	U.S. Provisional Pat. App. No. 61/408,839 (Nov. 1, 2010) ("'839 Prov. App.")

A. U.S. Patent No. 9,369,539 ("the '539 patent")

The '539 patent's claims relate to coordinating data transfer between a mobile device and a server to optimize traffic and conserve resources. The claims require a mobile device to query a user to select whether to enter a power save mode that, when entered, delays the download of server content the user has selected for download to another of her devices.

1. *"delayed for download" (claims 1, 7)*

SEVEN	APPLE
No construction necessary	Plain and ordinary meaning[1]

Apple agrees with SEVEN's description of the plain and ordinary meaning of "delayed for download" as articulated in its opening brief and supporting expert declaration. Specifically, "delayed for download" refers to a content selected for download that is delayed, beginning when the first mobile device is in the power save mode and ending when the second mobile device is not in power save mode. *See* SEVEN Op. Br. at 28; Goodrich Decl. (Dkt. 97-57) ¶ 53 ("Both claims specify a condition rather than a time when the delayed download will occur: 'when the second mobile device is not in the power save mode.'").

B. U.S. Patent No. 9,438,550 ("the '550 patent")

The '550 patent describes a technique for synchronizing content at two different locations, such as two email boxes. The claims are directed to power management features of this technique, which the patent discusses, if at all, in the first three paragraphs of column nine.

1. *"application data request" (claims 1, 15, 32)*

SEVEN	APPLE
plain and ordinary meaning, which is a "request for application data"	"a request for data initiated by an application"

---

[1] Based on the statements in SEVEN's briefing and its expert declaration, to narrow the parties' disputes, Apple adopts SEVEN's articulation of the term's plain and ordinary meaning.

The patent does not use the term "application data request," and Apple's construction thus flows from the plain language: an application data request is a request for data that comes from (i.e., is initiated by) an application. SEVEN disputes that the request is initiated by an application, but SEVEN's construction would give no effect to the key claim amendment SEVEN made to obtain allowance and thus cannot be correct.

The application for the '550 patent previously claimed a mobile device that sent a "transaction" to a host, to which the host responded with responsive data. *See* Ex. 1 (Mar. 3, 2016 Office Action Resp.) ("sending transactions . . . ; receiving data from the host responsive to the sent transaction . . ."); Porter Decl. (Dkt. 97-26) ¶¶ 50–51. With SEVEN's authorization, the examiner replaced "transaction" with "application data request." Ex. 2 (June 14, 2016 Not. Allowability) at 2; Ex. 3 (June 6, 2016 Interview Summ.). SEVEN incorrectly argues that the amendment added the requirement of a request, but that interpretation would give the amendment no effect since the original claim language already required a request (*i.e.*, the sending of data and receipt of "responsive" data).

By amending the claim to cover only "application data requests," not all "transactions," SEVEN narrowed the claim scope to requests made by an application, as opposed to requests made by a user. The '550 patent refers to two types of "transactions": (1) those initiated by applications, such as a synchronization requests, *see, e.g.*, '550 patent at 8:7–10; and (2) those initiated by users, such as a "user request," *see, e.g.*, *id*. at 7:27–29. Both might constitute "transactions," but only the first is the claimed "application data request."

SEVEN's enumerated arguments, all of which rely on specification passages describing the mobile device sending requests, not an application sending data requests, miss the mark. Apple's construction does not require an application ***send*** the application data request, nor does

2

Apple's construction contradict passages referring to the mobile device sending application data requests. Rather, Apple's construction confirms that an application request is from (i.e., *initiated by*) an application—regardless of what sends the request.

2.   *"a predetermined amount" (claims 1, 15, 32)*

SEVEN	APPLE
"a preset threshold"	"a preset threshold for entering selecting a power management mode and exiting low the power management mode"[2]

The parties agree that the predetermined amount is a "preset threshold," and SEVEN does not dispute that the same threshold can be used for selecting and exiting a power management mode. Claim 32 expressly requires using the same preset threshold both for "select[ing]" a power management mode, '550 patent at 12:27–33 ("select a low power mode . . . when the remaining battery level is below *the* predetermined amount"), and "exit[ing]" the power management mode, *id.* at 12:49–51 ("exit the low power management mode when the remaining battery level is above *the* predetermined amount"). Thus, the only dispute is whether in claims 1 and 15 the same threshold must be used both to select and exit the power management mode.

SEVEN's incorrect argument hinges on the fact that claims 1 and 15 separately use the phrase "*a* predetermined amount" in the "select" limitation and again in the "exit" limitation. But these two references to "a predetermined amount" must refer to the same "predetermined amount." Dependent claims (such as 3 and 19) use antecedent basis to refer back to "the predetermined amount" of the independent claims. *See, e.g.*, *id.* at 10:25–26. Thus, if the independent claims refer to two separate "predetermined amounts," as SEVEN posits, one could

---

[2] SEVEN's primary dispute is that it believes the claims "do not require that the 'predetermined amount' related to the selecting *must be the same battery level or relate to the same mode as the exiting*." SEVEN Op. Br. at 12. Apple modified its construction to adopt SEVEN's language on other issues and focus on this dispute.

not determine whether "the predetermined amount" in the dependent claims refers to the

predetermined amount of the "select" limitation or of the "exit" limitation—something SEVEN's

own expert could not do at deposition. *See* Ex. 4 (Jones Dep. Tr.) at 20:8–21:16.

The specification does not use the term "predetermined amount," but even the passages

on which SEVEN relies support Apple's construction. The '550 patent states that when the

battery charge is at a particular level, the mobile device synchronizes at a particular rate. *See,*

e.g., '550 patent at 9:12–16. If the synchronization rate is a "power management mode," as

SEVEN contends, the device "selects" a synchronization rate when the battery is at a preset level

(e.g., above 20%) and stops using that rate when the battery fails to reach that level (e.g., below

20%). *Id*. That is, the same level (in this example, 20%) causes the device to start and stop

using a particular synchronization rate. The patent never describes a device using a threshold

(e.g., below 20%) to cause the device to begin using a particular synchronization rate and then

continue to use that rate after the device has exceeded that same threshold. Thus, the only way to

reconcile the claims' inconsistent use of antecedent basis is by construing "predetermined

amount" as referring to the same preset threshold for selecting and exiting low power mode.

C. U.S. Patent No. 9,473,914 ("the '914 patent")

The '914 patent is directed to distributing content automatically to user devices using a

server. The server receives authentication tokens from a first and second device, and transfers to

one of the devices a representation of the content available for download. The user then selects

content to download; that content is then automatically transmitted to the second device as well.

1. "automatically transmitting" (claims 1, 11, 21)

SEVEN	APPLE
plain and ordinary meaning; to the extent construction is necessary: "sending content automatically (e.g., according to a user preference setting) as opposed to in response to a user selection of the content available from the content provider"	"sending content without a user indicating a desire to receive the download"

Apple's proposed construction captures the meaning of the term SEVEN adopted in the file history. During prosecution, the examiner rejected SEVEN's claims based on the Hayashi reference. Ex. 5 (Apr. 1, 2016 Non-Final Rej.) at 6. Hayashi described a system in which digital media could be downloaded from a server to a first client device and then "subsequently downloaded from the online media store server 102 to the second client device." *Id*. In response, SEVEN amended its claims to require "automatically transmitting" selected content to the second device. Explaining the change, SEVEN argued Hayashi "does not teach automatically downloading the content to the second device," because in Hayashi the user "indicates a desire to receive the download." Ex. 6 (Apr. 16, 2016 Amend.) at 10. SEVEN argued that, unlike Hayashi, its claimed server sends content to the second device without the user indicating a desire to receive the download. SEVEN now criticizes Apple's construction as "vague" and "unclear," but Apple uses the same language SEVEN used to distinguish Hayashi.

SEVEN's proposed construction fails for at least two reasons. First, SEVEN's inclusion of the parenthetical, "(e.g., according to a user preference setting)," improperly reads a limitation into the claims. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1320 (Fed. Cir. 2005). Second, SEVEN's proposed construction ignores the file history, giving no weight to SEVEN's definition of "automatically transmitting"—i.e., not requiring a user to indicate desire to receive the download. SEVEN's construction attempts to recapture the very same scope it gave up. That is, under SEVEN's construction, "automatically" would still encompass a system—like Hayashi— in which the user indicates a desire to receive the download, because a user preference setting would be an indication of a desire to receive the download.

D. U.S. Patent No. 9,516,127 ("the '127 patent")

The '127 patent relates to manipulating alarms/timers to optimize resource usage on a mobile device. From this description, the '127 patent claims a technique for optimizing traffic

and utilizing a "low power mode" on a device—a technique the patent does not disclose.

1.   "optimize" terms (claims 24, 33, 42)[3]

Claim Term	SEVEN	APPLE
"optimize background traffic"	"adjust background traffic to conserve network or mobile device resources"	"schedule background traffic to conserve network or mobile device resources"
"optimize traffic"	"adjust traffic to conserve network or mobile device resources"	"schedule traffic to conserve network or mobile device resources"
"receive a selection from a user whether to optimize traffic"	"receive a selection from a user whether to adjust traffic to conserve network or mobile device resources"	Apple proposes construing "optimize traffic" separately. Separate from that, this term needs no further construction

Apple's construction mirrors both SEVEN's proposal and the Court's prior construction

of a larger phrase, except that Apple substitutes "schedule" for "adjust." *SEVEN Networks, LLC*

v. Google, LLC, No. 2:17-cv-00442-JRG, Dkt. 342 at 28 (E.D. Tex. Oct. 23, 2018) ("*Google*

Markman Order"). SEVEN agrees that "scheduling" is one way to optimize traffic. SEVEN

Op. Br. at 7. Thus, the dispute is limited to whether Apple's use of the word "scheduling"

unnecessarily limits the claim, as SEVEN advocates. Due to SEVEN's statements in an IPR

proceeding that were not before the Court in the prior *Markman* proceeding, SEVEN is wrong.

Primarily, SEVEN incorrectly argues the claims cover turning off transmissions such that

the device "avoid[s] traffic altogether," contending any other reading "improperly excludes

embodiments from the claim." *Id.* at 7–8. But, in response to a prior IPR petition, SEVEN

argued the opposite, stating that turning off applications (such that those applications were not

sending traffic) was ***not*** "optimizing" traffic. In that IPR, the petitioner asserted the Jiang prior

art reference could optimize traffic by modifying the frequency of "background tasks," including

---

[3] SEVEN raises several disputes that are not relevant to the proceedings at issue. To narrow the issues, Apple adopts part of SEVEN's construction, limiting the disputed issue to whether traffic must be "schedule[d]" or "adjust[ed]."

by turning them on or off. Ex. 7 (IPR2018-01108 Pet.) at 16, 54–55; Ex. 8 (Jiang) at Fig. 4.

SEVEN argued Jiang did *not* disclose "optimiz[ation]": "[T]he Petition fails to demonstrate this

limitation is present in Jiang *because Jiang shows applications being turned off, not*

optimized."[4] Ex. 9 (IPR2018-01108 Pat. Owner Prelim. Resp.) at 50–52; Wicker Decl. (Dkt. 97-

26) ¶ 85. Thus, SEVEN told the PTO that turning off an application is not the same as

"optimizing" traffic. SEVEN cannot recapture that scope through claim construction. *Aylus*

Networks, Inc. v. Apple Inc., 856 F.3d 1353, 1359 (Fed. Cir. 2017) ("[S]tatements made by a

patent owner during an IPR proceeding can be relied on to support a finding of prosecution

disclaimer during claim construction.").

Second, SEVEN erroneously relies on the patent's discussion of "compression and

transcoding." SEVEN Op. Br. at 7–8. But "compression and transcoding" is not an "excluded

embodiment" as SEVEN contends, because the claim language requires receiving a selection

from a user to optimize traffic, not to compress or transcode. Likewise, the specification does

not include any description of receiving a selection from a user to compress or transcode data.

Third, SEVEN incorrectly argues that optimizing can include "caching and storing data

for future requests" and "accumulating data." Both of those operations *can* be achieved through

scheduling traffic, and SEVEN does not explain why those operations would be excluded under

Apple's construction ("schedul[ing] traffic") but not under SEVEN's ("adjust[ing] traffic").

> 2. *"the power save mode is based on a battery level of the mobile device"*
> *(claims 24, 33, 42)*

SEVEN	APPLE
No construction necessary	the ability to enter power save mode depends upon the battery level of the mobile device

---

[4] Unless otherwise noted, emphasis in quotes is added.

SEVEN agrees with Apple that this limitation requires dependency between the claimed "power save mode" and the battery level of a mobile device. Goodrich Decl. (Dkt. 97-57) ¶ 92. The parties disagree as to the extent of that dependency and without construction, the jury would not understand what it means for the "power save mode" to be "based on a battery level."

Apple's interpretation is based on the plain language of the claims and the context they provide. *Phillips*, 415 F.3d at 1314 ("[T]he claims themselves provide substantial guidance as to the meaning of particular claim terms."). Claim 24 is illustrative, requiring "receiving a selection from a user whether to enter a power save mode, where the power save mode is based on a battery level of the mobile device." '127 patent at cl. 24. Consistent with Apple's construction, the plain language suggests the disputed "where . . ." phrase modifies the preceding language reciting how to enter the power save mode.

SEVEN does not dispute that under Apple's interpretation, the power save mode is based on a battery level of the mobile device. SEVEN instead contends that Apple's interpretation reads out other preferred embodiments. But the '127 patent has no relevant embodiments, preferred or otherwise. The term "power save mode" is only used in the claims. Wicker Decl. (Dkt. 97-26) ¶ 88. The patent's written description does not disclose or otherwise provide any support for "receiving a selection from a user whether to enter power save mode, where the power save mode is based on a battery level of the mobile device." *Id.* Accordingly, Apple's construction cannot exclude any relevant embodiments.

Searching in vain for specification support of the claimed "power save mode," SEVEN references the patent's disclosure of a "mode selector" that allows for the "intelligent manipulation of the alarms/timers across multiple applications." SEVEN Op. Br. at 9. SEVEN argues that this ability to turn on (or off) the intelligent manipulation through a mode selector

describes entry into a power save mode. *Id.* But SEVEN previously (and unsuccessfully) tried

this same approach in the PTAB, arguing that an almost identical passage in the provisional

leading to the '127 patent disclosed the concept of a power save mode:

> [U.S. Prov. Appl. No. 61/805,070] describes a system for "the optimization of resource usage via intelligent manipulation of the alarms, timers or other triggers" which can be used to save battery power. . . Additionally, in one embodiment, this "optimization of resource usage" is turned on via a "mode selector." *Id.*, [00103]. Therefore, the Provisional describes a mode for saving power.

Ex. 9 (IPR2018-01108 Pat. Owner Prelim. Resp.) at 30–31. The PTAB rejected that argument,

refusing to equate manipulating of alarms and triggers with a "power save mode," and finding no

disclosure of the claimed "power save mode":

> We also are not persuaded by Patent Owner's argument, at this time, that the '070 application describes the claimed "power save mode" in that it "describes a system for 'the optimization of resource usage via intelligent manipulation of the alarms, timers, or other triggers' which can be used to save battery power," and "this 'optimization of resource usage' is turned on via a 'mode selector.'"

Ex. 10 (IPR2018-01108 Institution Decision) at 28.

SEVEN's expert in this case, Dr. Goodrich, conceded the lack of disclosure in the '127

patent, providing testimony consistent with the PTAB's finding that the '127 patent did not

disclose a "power save mode." First, he acknowledged that a "power save mode" is a "mode of

operation of a mobile device that is identified as—as saving power or could have that effect."

Then, he testified that the "manipulation of alarms, timers or other triggers" in the '127 patent

did not result in the savings of power for the device:

> Q. Would you agree with me, sir, that the '127 patent discloses *manipulating alarms, triggers and timers* in a way that *would necessarily result in the reduction of the power used by a mobile device*? . . . .
>
> THE WITNESS: *No*. . . I don't agree with that statement because of the balanced approach we just discussed.
>
> Q. Can you give me an example of how the manipulation of an alarm or timer in the '127 patent *would not result in the reduction of power used by a mobile device*?

9

A. . . . You reduce the alarms and triggers for some applications, thereby saving power for those applications, which then could enable a mobile device to give a more enhanced experience to the user with other applications, *which would have the net effect potentially of having the same power usage, not--not actually reduce it[.]*

Ex. 11 (Goodrich Dep. Tr.) at 99:21–100:22 (objection omitted). SEVEN's references to manipulating alarms, timers or triggers is not only irrelevant, but has already been rejected.

E. U.S. Patent 9,603,056 ("the '056 patent")

1. "backlight"(claims 1, 10, and 19)

SEVEN	APPLE
"an illumination device that provides light behind a viewing surface"	"an illumination device that provides light behind a non-emissive display"

The parties' respective proposed constructions for "backlight" in the '056 patent correspond to the proposed constructions of "backlight" in U.S. Patent Nos. 9,516,127 and 9,516,129 in *SEVEN Networks, LLC v. Google*, wherein the Court essentially adopted SEVEN's proposal. *Google Markman Order* at 10–14, 36–37, 44–45. The parties desire to reduce burden on the Court and the parties, such that the Court may re-enter its prior ruling on this term without additional argument here, while allowing the parties to preserve their positions for appeal. Thus, the parties respectfully request the Court deem incorporated by reference herein the arguments and evidence previously presented regarding "backlight." *See SEVEN Networks, LLC v. Google, LLC*, No. 2:17-cv-00442-JRG, Dkt. 279 at 1 (Reply Br.); *id.*, Dkt. 263 at 1–2 (Am. Resp. Claim Constr. Br.) and evidence cited therein; *id.*, Dkt. 208 at 1–2 (Resp. Claim Constr. Br.) and evidence cited therein; *id*, Dkt. 191 at 1–11 (Op. Claim Constr. Br.) and evidence cited therein.

F. U.S. Patent Nos. 9,712,476 and 10,135,771 ("the '476 and '771 patents")

The '476 and '771 patents' asserted claims describe securely sending data between two devices via an intermediary server using "tokens" and/or "security associations."

1. The preambles of claims 13 and 23 of the '476 patent

10

SEVEN	APPLE
The preamble is not limiting	The preamble is limiting

The preambles of the '476 patent's claims 13 and 23 are limiting because they provide the sole antecedent bases for essential structural components (servers) recited in dependent claims. SEVEN bases its contrary argument on an incorrect assertion that "[t]here is no reference in the body of the claims to the preambles." SEVEN Op. Br. at 27. In fact, the preambles provide antecedent bases for terms in dependent claims as shown below:

Claim 13	Claim 23
13. A method implemented on **an intermediary server**, the method comprising…	23. **A server** for processing a transaction, **the server** having a processor configured to…
14. The method of claim 13, wherein the first computer is a first mobile device, and the first mobile device and **the intermediary server** are coupled over a mobile network	24. The server of claim 23, wherein the first computer is a first mobile device, and the first mobile device and **the server** are coupled over a mobile network.
21. The method of claim 20, wherein the device identification provides the transaction routing information for **the intermediary server**.	31. The server of claim 30, wherein the device identification provides the transaction routing information for **the server**.

A preamble is generally limiting where, as here, "the claim(s) depend on it for antecedent basis." *C.W. Zumbiel Co. v. Kappos*, 702 F.3d 1371, 1385 (Fed. Cir. 2012). This remains true where an independent claim's preamble "provide[s] antecedent basis for a term in a dependent claim." *Whirlpool Corp. v. TST Water, LLC*, No. 2:15-CV-1528-JRG, 2016 WL 3959811, at *7 (E.D. Tex. July 22, 2016) (citing *Pacing Techs., LLC v. Garmin Int'l, Inc.*, 778 F.3d 1021, 1024 (Fed. Cir. 2015));[5] *see also Super Interconnect Techs. LLC v. Huawei Device Co.*, No. 2:18-CV-

---

[5] *See also PersonalWeb Techs. LLC v. Int'l Bus. Machines Corp.,* No. 16-CV-01266-EJD, 2017 WL 2180980, at *13, n.15 (N.D. Cal. May 18, 2017) (finding a preamble limiting where it provided antecedent basis for a dependent claim, but noting that *Pacing Techs.* does not create a "bright-line rule" that this situation "is always sufficient to render a preamble limiting").

11

462-JRG, 2020 WL 60145, at *10–13 (E.D. Tex. Jan. 6, 2020) (finding preamble limiting where it provided antecedent basis for dependent claim).

The preambles of claims 13 and 23 do not merely state the "purpose or intended use" of the inventions, nor are they merely "'descriptive' of the limitations" in the claims' bodies.[6] Rather, these preambles recite an essential structural component of the claimed inventions consistent with the specification.[7] Generally, the '476 patent claims describe schemes to securely transfer data. As explained throughout the specification and shown in Figures 1 and 2, the claimed schemes involve synchronizing transactions between three components: a first computer (e.g., mobile device 21); a second computer (e.g., personal computer 38); and a server (e.g., management server 28). *See, e.g.*, '476 patent at 2:52–56; 3:44–4:22. The "server" recited in the preambles is therefore an essential structure.[8] Thus, the claims' bodies necessarily cannot define "a structurally complete invention" because, without the recited server, the alleged inventions are structurally incomplete. Here, the "server" "aspect of the preambles is more than simply a statement of intended use, they reflect an important aspect of the described invention and are essential to properly understanding limitations in the claim bodies." *United States Auto. Ass'n v. Wells Fargo Bank, N.A.*, No. 2:18-CV-00366-JRG, 2019 WL 3423652, at *5–9 (E.D. Tex. July 29, 2019). Therefore, to "give life, meaning, and vitality" to these claimed inventions,

---

[6] *Super Interconnect*, No. 2:18-CV-462-JRG, 2020 WL 60145, at *11 (quoting *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed. Cir. 1999) and *IMS Tech., Inc. v. Haas Automation, Inc.*, 206 F.3d 1422, 1434 (Fed. Cir. 2000)).

[7] *Super Interconnect,* No. 2:18-CV-462-JRG, 2020 WL 60145, at 10–13; *Proveris Sci. Corp. v. Innovasys, Inc.*, 739 F.3d 1367, 1372 (Fed. Cir. 2014) ("A preamble is generally construed to be limiting if it 'recites essential structure or steps'. . . that are highlighted as important by the specification.").

[8] For example, claims 14 and 24 add certain limitations that "coupl[e]" the "first computer" and "the [intermediary] server."

12

the preambles of claims 13 and 23 of the '476 patent must be limiting. *Super Interconnect*, No. 2:18-CV-462-JRG, 2020 WL 60145, at *12 (quoting *Pitney Bowes*, 182 F.3d at 1305).

> 2. *"token" (claims 1, 13, 23, 33, 43 ('476 patent); claims 1, 7, 11, 14, 26, 28-30 ('771 patent))*

SEVEN	APPLE
"created identifier comprising a unique string of data"	"data representing user validation"

"Where a claim term has no ordinary and customary meaning, a court must resort to the remaining intrinsic evidence—the written description and the prosecution history—to obtain the meaning of that term." *Goldenberg v. Cytogen, Inc.*, 373 F.3d 1158, 1164 (Fed. Cir. 2004). Here, the patents' common specification does not use token consistent with its generally accepted meanings (evidenced by dictionary definitions). Houh Decl. (Dkt. 97-33) ¶¶ 67–72, Exs. D-G thereto. Thus, "token" "cannot be construed broader than the disclosure in the specification." *Indacon, Inc. v. Facebook, Inc.*, 824 F.3d 1352, 1357 (Fed. Cir. 2016). In light of that specification, the proper construction of "token" is "data representing user validation." Houh Decl. (Dkt. 97-33) ¶¶ 58–77.

The specification confirms that the claimed "token" provides data representing user validation. Each claim requires the claimed "token" provide some routing information. '476 patent at cls. 1, 13 ("the token provides transaction routing information"); *id.* at cls. 13, 23 ("information that provides… transaction routing information wherein the information includes the token"); '771 patent at cls. 1, 14, 26 ("transmitted to a second computer by the intermediary server based on the token"). The only arguable disclosure of such a "token" in the specification is the "auth_token": "The management server 28 ***uses the auth_token*** to identify and authenticate the source of each transaction and ***to determine where to route the transaction***." '476 patent at 6:21–24. The specification explains that the auth_token is used to identify and authenticate each transaction's source after validating a username and password:

13

> Mobile device 21 attaches an auth_token to transactions sent to the management
> server 28. For example, the mobile device 21 may be required to authenticate to
> the management server 28 by transmitting a username and password prior to being
> permitted to submit other transactions for processing. The server 28 issues the
> mobile device 21 an auth_token after successfully validating the username and
> password against information in the user database 42. The mobile device 21 then
> attaches the auth_token to subsequent transactions sent to the management server
> 28.

Id. at 6:12–21. Thus, contrary to SEVEN's suggestion, the described auth_token is not only used

to determine where to route the transaction. Other passages are in accord, explaining that

auth_token values are matched to contents in a ***user*** database. *Id.* at 9:19–37; Houh Decl. (Dkt.

97-33) ¶ 65. As set forth in Apple's construction, the "auth_token" must represent user

validation such that the subsequent transactions can be sent without having to repeat the

validation process. Houh Decl. (Dkt. 97-33) ¶ 62. How that validation is done depends on the

embodiment. Apple's construction, however, only requires that the token is data representing

user validation, not that the user validation have been performed in a particular manner.

Contrary to SEVEN's argument, construing "token" as "data representing user

validation" is consistent with the token also providing routing information. In fact, the example

that SEVEN highlights from the provisional applications demonstrates that a token is data

representing user validation. In that example, an "authToken" is described as providing routing

("connection") information, but only after user validation ("credentials matching"): "When a

front end authentication request comes in, the connection list is searched for a connection that

has ***credentials matching those of the authorization request***. The returned authToken is a direct

key to a particular connection." Ex. EE (Excerpts of '881 Prov. App.) to SEVEN Op. Br. at

SEVEN_APPLE-07998. That same section also describes supplying an authToken in response

to successfully authenticating a user based on user ID and password. Ex. 12 (Excerpts of '881

Prov. App.) at SEVEN_APPLE-00008003–04.

SEVEN incorrectly argues that the provisionals' mention of a "sync_token" that represents sync state demonstrates that the claimed "token" need not be data representing user validation. SEVEN Op. Br. at 23. But, that described "sync_token" is inconsistent with the '476 and '771 patents' claims, which SEVEN agrees describes a token as providing routing information. The sync_token does not provide routing information. Ex. EE (Excerpt of '881 Prov. App.) to SEVEN Op. Br. at SEVEN_APPLE-09685; Ex. 4 (Jones Dep. Tr.) at 59:17–20. Thus, the sync_token is not an example of the claimed token.

Nor does the examiner's use of Noam demonstrate that the claimed token need not be data representing user validation. First, the patentee did not admit that Noam disclosed a "token." Second, the examiner relied on a different portion of Noam than what SEVEN relies on. *Compare* Ex. GG to SEVEN Op. Br. at 7, *with* SEVEN Op. Br. at 23. Third, examiners apply the broadest reasonable interpretation of terms, which is not the standard the Court applies here. *Facebook, Inc. v. Pragmatus AV, LLC*, 582 F. App'x 864, 869 (Fed. Cir. 2014); *see also NovelPoint Learning LLC v. LeapFrog Enters., Inc.*, No. 6:10-cv-229, 2012 WL 629537, at *8 (E.D. Tex. Feb. 27, 2012).

SEVEN's proposed construction—"created identifier comprising a unique string of data"—is incorrect for at least two reasons. First, rather than relying on the patents' own intrinsic record, SEVEN primarily relies on a definition of token in unrelated patents, with no common inventors and a priority date two years later than the '476 and '771 patents' claimed priority. *See* SEVEN Op. Br. at 22. SEVEN offers no reason why a POSITA would look to the unrelated patents to understand the meaning of "token" in the '476 and '771 patents, and none exists. Rather, the fact that the unrelated patents explicitly defined token in their specification reinforces the need to examine each patents' specification to determine the meaning of "token"

15

as used therein. And, as discussed above, the '476 and '771 patents' specification confirms

Apple construction that a "token" is "data representing user validation."

Examination of the '476 and '771 patents' specification also illustrates that SEVEN's

construction of "token" as "a created identifier comprising a unique string of data" is overbroad.

The specification includes many "created identifier[s] comprising a unique string of data" that

the inventors do not refer to as tokens and that are not tokens, at least because they do not

provide routing information. For example, the device identification "identifies the particular

mobile device 21" and may be represented as a unique string of data "xyz." '476 patent at 6:7,

6:25. The username and password are identifiers created by the user as unique strings of data to

authenticate the user. *Id.* at 6:14–19. Although the disclosed token, the "auth_token," can be a

unique string of data, so too can the disclosed device identification, username, and password,

which are not tokens. Thus, SEVEN's proposed construction is overly broad.

> 3.   *"security association" (claims 1, 13, 23, 33 ('476 patent); claim 27 ('771
>   patent))*

SEVEN	APPLE
"information enabling encrypted or clear communications between two end points"	"a cryptographic ciphersuite including an encryption cipher, key length, and digital signature algorithm and a unique encryption key enabling secure communication between two end points"

The '476 and '771 patents' shared specification consistently, repeatedly, and exclusively

explains that a "security association" specifies a cryptographic ciphersuite (including encryption

cipher, key length, and digital signature algorithm) and a unique encryption key. When the

specification first explains a "security association," it details that "a *security association*

specif[ies] a cryptographic ciphersuite (including encryption cipher, key length, and digital

signature algorithm) and a unique, secret point-to-point encryption key 29." '476 patent at

2:65–3:3. The specification also explains a "point-to-point security association" as "specifying a

cryptographic ciphersuite and a unique encryption key." *Id.* at 3:10–12. Similarly, it explains an "end-to-end security association" as "specifying a cryptographic ciphersuite and a unique encryption key." *Id.* at 3:29–31. Each subsequent time a "security association" is mentioned (regardless of whether it is discussed in the context of the negotiated or predefined security association embodiments), the specification either reiterates the requirement of a cryptographic ciphersuite and a unique encryption key or uses the term "security association" alone, but in a manner consistent with the earlier definition. *Id.* at 5:62–67; 6:35–37; 7:10–27, 33–35; 7:63–8:7, 8:51–60; 9:41–42, 59–63; 10:23–24, 60–66; Houh Decl. (Dkt. 97-33) ¶ 82.

Where the patentee unwaveringly characterizes a claim phrase in a particular way, it should be construed accordingly. *Profoot, Inc. v. Merck & Co., Inc.*, 663 F. App'x 928, 933 (Fed. Cir. 2016) (upholding construction of neutralizer to include housing, protractor, and angularly adjustable plate because the specification consistently and repeatedly discloses the neutralizer as having such components and did not contemplate a neutralizer without such). Here, the patentee repeatedly and expressly specified a "security association" to include the components set forth in Apple's proposal and it should be construed accordingly.

SEVEN instead proposes broadly interpreting "*security* association" as "*information enabling* encrypted or *clear communications* between two end points." SEVEN's proposed construction ignores both the claim language and the specification. First, clear communications are communications that are not encrypted and thus not secure. '476 patent at 6:60–61, 7:65–66, 8:39–40, 8:50–51, 9:57–59, 11:30–33. The meaning of the claim term "security" makes it illogical that a "*security* association" would enable *clear* communications, as SEVEN proposes. Second, and consistent with the claim language, the specification does not contemplate using a "security association" for clear, as opposed to encrypted, communications. The claims and

17

specification only describe using security associations for secure communications. *See, e.g.*, *id.* at cl. 1 ("encrypting . . . using a [first/second] security association"); cl. 33 ("encrypt . . . using a [first/second] security association"); 1:51–54 ("encrypts . . . using a point-to-point encryption key corresponding to a first security association"); 7:63–8:7 ("bits … are encrypted using the point-to-point security association. . . . . bits are encrypted using the end-to-end security association"). *See also id.* at 1:54–57, 7:10–12, 9:59–63, 10:60–66.

To support its construction that a "***security*** association" can be information that enables ***clear*** communication, SEVEN relies heavily on the patent's statement that "the items in each channel are associated with predefined security associations: clear, pp, and ee." *Id.* at 7:32–35. However, SEVEN ignores the remainder of that description which reveals the "clear" predefined security association refers to ***the absence of a security association*** for the clear channel:

> The bit arrays are then ***encrypted in block 108 according, to, the security association parameters for each channel***. According to the encryption schema 94, ***bits in the clear channel (data_group_1) are not encrypted***. ***The bits in the pp channel data_group_2 are encrypted using the point-to-point security association*** between mobile device 21 and management server 28, using PP key 27, and are referred to after encryption as pp_data_group_2. ***The bits in the ee channel data_group_3 are encrypted using the end-to-end security association*** between mobile device 21 and personal client 40, using EE key 46, and are referred to after encryption as ee_data_group_3.

Id. at 7:62–8:7. Only the "pp" and "ee" channels involve predefined security associations; the clear channel does not. The patents contain no disclosure of a security association (predefined or negotiated) used to enable clear communications. Thus, no basis exists to broaden "security association" to encompass information enabling clear communications.

Additionally, neither the un-asserted '342 patent nor the unrelated Hawkes reference demonstrate that Apple's construction is incorrect. Dependent claim 22 of the '342 patent requires that the "security association" specify a "cryptographic algorithm" or a "cryptographic key length." Apple's construction is not inconsistent as it does not require either. It requires a

18

digital signature, not a cryptographic algorithm. These are not the same. '476 patent at 3:1–6.

Apple's construction requires a generic, not a cryptographic, key length. Hawkes provides an

"introduction to terminology used in association with IPSec," including that IPSec uses "security

association" to "describe the parameters, such as the encryption key and encryption algorithm,

used to encrypt and/or authenticate communications." Ex. HH (Hawkes) to SEVEN Op. Br. at

10:35–61. This use is consistent with Apple's construction, which similarly requires certain

parameters used for encryption. Regardless, the issue before the Court is the meaning of

"security association" in light of the '476 and '771 patent specification, not IPSec. As set forth

above, that specification supports Apple's construction.

> 4.   "receiving a token issued by an intermediary server"(claims 1, 14, 26
>   ('771 patent))

SEVEN	APPLE
"receiving a token created by an intermediary server"	"receiving a token sent from an intermediary server"

In the '771 patent, intrinsic evidence confirms that "receiving a token issued by an

intermediary server" means "receiving a token sent from an intermediary server." The only

specification passage discussing the receipt of tokens describes a server issuing a token to a

mobile device after validating the user, and then the mobile device—now possessing the token it

received from the server—attaching that token to subsequent transactions:

> Mobile device 21 attaches an auth_token to transactions sent to the management
> server 28. . . . ***The server 28 issues the mobile device 21 an auth_token*** after
> successfully validating the username and password against information in the user
> database 42. The mobile device 21 then attaches the auth_token to subsequent
> transactions sent to the management server 28.

'771 patent at 6:20–29. From this passage, a POSITA cannot know whether the server created

the token, looked it up, or obtained it from elsewhere, as creation is not described, nor is it

implied or a necessary predicate to the server being the token's sender. Houh Decl. (Dkt. 97-33)

¶¶ 86–88. But a POSITA would understand that the token is sent by the server. *Id*. The patent never describes a server "creating" a token—it only describes a server issuing a particular device token, meaning the server must send the token to that device.

SEVEN's argument that "issued" in a general context means "created" because a token must exist before it can be sent is unavailing. *See* SEVEN Op. Br. at 25–26. Apple agrees that creation precedes sending; Apple disagrees that the claim language addresses creation. In other words, that a token must exist before it can be sent does not justify narrowing the phrase "receiving a token issued by an intermediary server." SEVEN also argues this phrase should be narrowly construed because: (1) the applicant would have used "transmit" to convey sending; and (2) a piece of prior art allegedly equates issuance with creation. *Id.* Neither argument supports departing from the term's meaning as supported by the specification.

First, the applicant's use of "transmit[ing/ed]" in claims does not justify SEVEN's narrowing construction of "receiving a token issued by an intermediary server." Of course, the applicant could have easily used the phrase "generated by" to convey creation, as the applicant did in related patents. *See, e.g.*, Ex. 13 ('393 patent) at cls. 15, 29 ("the processor **generates** a header"). Further, there is no redundancy between "transmitting" and "issued by." The claims use "transmit[ing/ed]" to focus on **where** data is sent to, not to identify **what** is sending data; "issued by" is used to identify **what** is sending data. *See* '771 patent at cls. 1, 14, 26. The specification highlights this distinction, describing (in relevant part): (1) a server issuing a mobile device a token; (2) the mobile device attaching the token to subsequent transactions. *Id.* at 6:20–32. In other words, this passage, like the claim language, identifies the token's sender

20

(which is not necessarily its creator).[9] If "issued by" means "created by," then the claim recites a

server creating a token, but does not recite from where the mobile device receives the token.

This reading is contrary to the specification and, indeed, would not make sense, since creating a

token without sending it to the mobile device would mean the mobile device could not take the

described actions making use of the token. Houh Decl. (Dkt. 97-33) ¶¶ 86-88.

Second, Noam's discussion of "issuer institutions" does not alter this conclusion.

SEVEN cites no authority for elevating this reference over the '771 patent specification to

narrow the disputed term. Indeed, SEVEN points to no prosecution history citations that show

the applicant or the examiner understood "issued by" to mean the server created the token as

opposed to having sent the token.

SEVEN's reliance on extrinsic evidence is similarly unpersuasive. First, SEVEN points

to definition numbers 21 and 22 in *Webster's*—"printed" or "originate," respectively—ignoring

the preceding definitions directly supporting Apple's construction, including for example, "18. to

send out" and "20. to be sent, put forth or distributed authoritatively or publicly." SEVEN Op.

Br. at 26; Ex. II to SEVEN Op. Br. Second, the sole case that SEVEN cites, *Stambler v. ING

Bank, FSB*, 2011 WL 4527648, at *13 (E.D. Tex. Sept. 28, 2011), is distinguishable, because

there the claim language explicitly equated issuing with creating (which the parties did not

dispute; they disputed temporal restrictions on claim elements). No extrinsic evidence relied on

by SEVEN tips the scales in favor of its unsupported, narrowing construction.

G. U.S. Patent Nos. 9,769,176 and 10,243,962 ("the '176 and '962 patents")

The '176 and '962 patents' asserted claims describe a server that receives registration

---

[9] Similarly, construing "issued by" to mean "sent from" does not "read out" the term "receiving" (*see* SEVEN Op. Br. at 26; Jones Decl. (Dkt. 97-58) ¶ 40), as "receiving" refers to receipt of the token, but does not identify where the token was sent from.

information for a data store, and uses certain identifiers, connections, and messages to send information from the data store to a client device.

> 1. *"registration information" (claims 1, 14 ('176 patent); claims 1, 23 ('962 patent))*

SEVEN	APPLE
"information to access a service"	"user information to access a service"

The parties are largely in agreement as to the meaning of "registration information," but SEVEN misapprehends the remaining dispute. Despite SEVEN's suggestion otherwise, Apple does not contend that "registration information" is limited to user information. *See* SEVEN Op. Br. at 30. Apple agrees that "registration information" "may include information about the client device." *Id.* The remaining dispute appears to be whether "registration information" consists *only* of device information. It does not. Because the patents explain that "registration information" must include at least some user information, the Court should adopt Apple's construction.

The '176 and '962 patents—which share a specification—are, in part, directed to a system for "simplified provisioning" of online services. '176 patent at 1:24. At the time, accessing online services typically required repeated registration and authentication, which was time-consuming and required the user repeatedly to provide "specific information about the user," "billing information . . . to identify the user," and/or "the user's personal information." *Id.* at 1:66–2:11. To avoid this, the patents teach a system in which the same user information is collected, stored, accessed, and automatically filled in. *Id.* at 9:3–16 ("When the client 110 logs on to the server 130 to check email, the server 130 may capture[, *inter alia*,] **the username of the user associated with the client 110**" and later access that information "to complete a registration **for the user** at the client 110 requesting services").

Although the claimed "registration information" might include information about the

22

client device, the specification confirms that registration information must include ***at least*** user

information. That is because the patent repeatedly and consistently explains "registration" is

something done for a user.[10] No disclosure contemplates "registration information" consisting

only of information about a client device.

        None of SEVEN's cited evidence contradicts this. Although SEVEN identifies passages

in which registration information optionally includes information about a client device, those are

consistent with Apple's proposed construction. *See, e.g.*, SEVEN Op. Br. at 30–31. Those

passages describe registration information that includes ***both*** "information about the user ***and*** the

user device." *Id.* (citing '176 patent at 12:20–25). Thus, Apple's construction captures the

specifications' requirement that registration information includes at least user information. Nor

does the prosecution history to which SEVEN cites support its contention that registration

information may consist solely of client device information. In Katsube, just as in the '176 and

'962 patents, the "registration information" includes "user information": "The registration

information includes . . . user information . . . and information required for performing user

registration in the service providing server." Ex. MM (Katsube) to SEVEN Op. Br. at [0376].

H. U.S. Patent No. 10,027,619 ("the '619 patent")

        The '619 patent claims a device operable to receive from a remote device a "service

activation code" that the device uses to register the remote device to a messaging account,

---

[10] *See, e.g.*, '176 patent at 8:63–67 ("The registration component 220 can utilize information . . .
to 'pre-fill' or to otherwise fill in information associated with, a registration for the user"); 9:13–
15 ("[T]he registration component 220 accesses the information . . . to complete a registration for
the user"); 10:4–7 ("The registration component 220 can provide user information to the billing
component 230 that may be needed regarding where to bill the user, such as an email address");
11:47–48, 12:15–18 (describing Fig. 4, "[a]t Step 410, information associated with a user is
stored. . . . By locating the information . . . previously collected, the information can be utilized
to register the user during the provisioning event"); 6:12–13; 11:39–41; 12:20–35; 13:13–14.

whereafter the device can receive messages for the messaging account, encrypt them, and send

them to the remote device.

1. "service activation code" (claims 22, 37, 51)

SEVEN	APPLE
"code relaying information used to register a remote device for access to a messaging account"	"code relaying information used to authenticate a user's access to a messaging account"

During prosecution, SEVEN specially defined the claimed service activation code to

distinguish the prior art, telling the patent office a service activation code "must relay

information to the host system such as a user name and password combination." Ex. 14 (Aug. 1,

2017 Resp. to Office Action) at 12. Apple's proposed construction captures this definitional

statement because a user name and password authenticate a user's access to an account. In

contrast, SEVEN's proposed construction ignores this file history entirely, attempting to

recapture subject matter SEVEN disclaimed.

The examiner repeatedly rejected SEVEN's claims based on the Anttila reference,

causing SEVEN to define its service activation code to distinguish Anttila. According to

SEVEN, Anttila described a visual code displayed on one device, which a second device

captured and used to initiate a short-range communication link to transfer data between the

devices. *Id*. In contrast, SEVEN argued, its invention used a service activation code to register

the remote device for access to a messaging account, and "the *service activation code* must relay

information to the host system *such as user name and password combination*." *Id*. (emphasis

original). Unconvinced, the examiner again rejected SEVEN's claims. Ex. 15 (Nov. 3, 2017

Non-Final Rej.) at 12–20. SEVEN appealed the decision, reiterating that unlike Anttila's visual

code SEVEN's "*service activation code* must relay information to the host system *such as user

name and password combination.*" Ex. 16 (Feb. 5, 2018 Pre-Appeal Br.) at 6 (emphasis

24

original). This time, SEVEN convinced a panel of examiners and the patent office allowed the

claims, which now carry the narrow meaning of service activation code that SEVEN repeatedly

emphasized. SEVEN's brief conspicuously fails even to address this portion of the file history.

Apple's construction is faithful to SEVEN's definition, as confirmed by the specification.

A user enters his or her user name and password in order to authenticate his or her access to a

device or account, as the patent's specification confirms. *See* Wicker Decl. (Dkt. 97-26) ¶ 141.

The patent explains that, in one embodiment, the "host system"—i.e., the claimed device that

receives the service activation code—authenticates the person who enters the service activation

code. '619 patent at 4:56–58. To do so, the authentication "technique may rely on the

authentication of the underlying e-mail system, such as ***user name and password combination***."

Id. at 4:61–64. SEVEN counters that, unlike the claimed use of the service activation code, that

"authentication" step in the specification is performed by the host system and precedes the use of

the service activation code. SEVEN's observation is correct, but irrelevant. SEVEN cannot

dispute that the specification links use of a user name and password with authenticating a user,

and that linkage supports Apple's construction. The fact that the specification does so in the

context of an earlier, unclaimed authentication step does not undermine that conclusion.

The patent's claim language also supports Apple's construction, confirming the service

activation code is used to authenticate a user's access to a messaging account. Wicker Decl.

(Dkt. 97-26) ¶ 142. For example, claims 22, 37, and 51 require the device to "register[] the

remote device for access to a messaging account ***using the service activation code***." That is

consistent with a code used to authenticate a user's access to a messaging account by conveying

information such as a user name and password. SEVEN's argument that claim 37 includes a

different "authentication" limitation is irrelevant to this dispute as it pertains to a separate

authentication step—i.e., authenticating the claimed "device," **not** the remote device or its user. '619 patent at cl. 37 ("authenticating a **device** for access to the messaging account . . . registering the **remote device** for access to the messaging account using the service activation code").

I.   U.S. Patent No. 10,039,029 ("the '029 patent")

The '029 patent's claims relate to "predicting an activity session" and "optimizing communications." Among other things, the claims require a mobile device that communicates over an established multiplexed connection, predicts an activity session, and fetches data for an application before that activity session begins.

1.   The preamble of claim 1

SEVEN	APPLE
The preamble is not limiting	The preamble "[a] mobile device having an established multiplexed connection for optimizing communications" is limiting.

As discussed above with respect to '476 patent, a preamble is generally limiting where "the claim(s) depend on it for antecedent basis." *C.W. Zumbiel*, 702 F.3d at 1385. That is the case here—not only with respect to the body of claim 1, which recites "communicating over the established multiplexed connection"—but also as to claim 2, which recites "the established multiplex connection is a TCP connection."

Claim 1's preamble does not merely state the invention's "purpose or intended use," nor is it merely "'descriptive' of the limitations" in the claims' bodies. The "multiplexed connection" forms a fundamental component of the claimed invention in that it allows a reference for defining the "second connection" over which data is fetched. Moreover, the elements of the claim body do not combine to form an established multiplexed connection, nor is "having an established multiplexed connection" an inherent aim of the mobile device. Rather, the multiplexed connection is a necessary component of the mobile device. Furthermore, the claim explains that the multiplexed connection is "for optimizing communications," telegraphing

26

that SEVEN claimed a specific sort of multiplexed connection.

SEVEN's only counterexample of an instance in which a preamble was not limiting despite providing antecedent basis for the claim body—*Schumer v. Laboratory Computer Systems, Inc.*—is inapposite. 308 F.3d 1304 (Fed. Cir. 2002). In that case, the preamble merely described the environment in which the claimed invention was used. *See id.* at 1310 ("Here, the preamble simply describes features that necessarily exist in any coordinate system for a digitizer. . . ."). Here, in contrast, the claimed multiplexed connection is part of the mobile device.

SEVEN also argues the preamble "would need to further define and limit the features recited in the claim body" or it is superfluous. SEVEN Op. Br. at 33. But that is exactly what the preamble does. The claim body requires ***communicating*** over an established multiplexed connection and the preamble recites that the device ***has*** an established multiplexed connection.

2. *"established multiplexed connection" (claims 1 and 12)*

SEVEN	APPLE
Plain and ordinary meaning; to the extent construction is necessary "connection used to send or receive messages for two or more applications"	"a single, proxied connection for transmission of data from multiple applications"

The term "established multiplexed connection" merits construction because the term "multiplex" can have different meanings in different technical contexts and this is not a phrase that would be readily understandable by the jury. *See* Porter Decl. (Dkt. 97-30) ¶ 97. "Multiplexed connection" is discussed only twice in the 43 columns of the '029 patent's written description. First, the patent discloses that "the local proxy can request a multiplexed connection to be established to optimize the signaling during the [activity] session" and distinguishes the multiplexed connection from an "existing TCP connection" that can be "converted into a multiplexed session and used for the optimized connection." '029 patent at 28:26–36. This passage also teaches that the multiplexed connection "can be established for . . . data transfers."

27

Id. Second, the patent explains that a benefit of its distributed proxy architecture is that a "single TCP connection can be used to transport all of the application traffic during an established activity session." *Id.* at 30:30–35. Additionally, "an activity session may be supported by a multiplexed TCP connection," or alternatively "by a TCP connection pool." *Id.* at 30:38–41.

Thus, Apple's construction includes the adjectives "single" and "proxied" in order to give effect to the term "established." SEVEN's construction, in contrast, reads out this limitation entirely and for that reason cannot be correct. As to the term "single," the patent explains a "***single TCP connection*** can be used to transport all of the application traffic during an ***established*** activity session." *Id.* at 30:30–35. The purpose of the word "single" in Apple's proposed construction is to reflect that when an activity session is established, traffic from multiple applications is carried by one "single" connection. It does not exclude the existence of other connections (such as the second connections). However, it does enforce the requirement that the communication must exist over a "single" established connection rather than multiple or ephemeral connections that may or may not exist at the time of the data transmission.

The "proxied" requirement is also inherent in the term's meaning in the context of this patent. Contrary to SEVEN's argument, "proxied" is not a word Apple made up; it reflects the "proxy" term that is fundamental to SEVEN's purported invention. SEVEN introduced the notion of using a client and/or server proxy in the ancestor patent application (App. No. 13/188,553 ("the '553 application")) to which the '029 patent claims priority. During the prosecution of that application, the examiner issued a restriction requirement identifying three distinct inventions: (I) a method of optimizing wireless network traffic, (II) a method for reducing cellular network traffic, and (III) "a system with distributed proxy for reducing traffic." Ex. 17 ('553 App.) at APL-SN_01255625 (emphasis original). The claims from Group III (i.e.,

claims 36-39, 43-50) emphasize the importance of this distributed proxy, including multiple

"local proxy" and "proxy server" limitations. *Id.* at APL-SN_01252045–48. The '029 patent is

a grandchild of that '553 application, and as originally filed included one of the very same Group

III (distributed proxy) claims from the original '553 application along with another claim

directed at a "proxy server." *See* Ex. PP to SEVEN Op. Br. at 2.

Thus, using proxies forms a central part of the '029 patent and its claimed inventions.

See ACCO Brands, Inc. v. Micro Sec. Devices, Inc., 346 F.3d 1075, 1079 (Fed. Cir. 2003) ("The

presence in the '989 specification of embodiments carried over from the parent application, but

claimed in other patents, does not serve to broaden the scope of the '989 claims that were the

subject of the divisional application."). As described above, the benefit of this proxy (i.e.,

having a client proxy located at the mobile device and a server proxy located at a server) is that it

enables traffic for multiple applications to be carried through a single "multiplexed" connection.

Accordingly, in order to have a "multiplexed" connection in the '029 patent, the connection must

be a "proxied" connection.

SEVEN argues that the "proxied" aspect of its invention should not apply because it

changed the title and abstract of the application many years after the original specification and

after the accused products were released. SEVEN Op. Br. at 35. This is incorrect. Changing the

title and abstract cannot change the scope of the disclosure. *See Applied Materials, Inc. v.*

Advanced Semiconductor Materials Am., Inc., 98 F.3d 1563, 1579 (Fed. Cir. 1996) (J. Archer,

concurring) ("Although there may be some variation in the scope of the claimed subject matter, a

continuation application is based solely on the disclosure of a parent application.").

The remaining aspects of the competing constructions concern whether the established

multiplexed connection is "for transmission of data from multiple applications" (as Apple

contends) or "used to send or receive messages for two or more applications" (as SEVEN contends). At a high level, the parties seemingly agree that one connection is somehow shared by multiple applications. But Apple's proposal is better supported by the '029 patent claims and specification. The '029 patent's claims are concerned with "fetching data," not sending or receiving "messages." Likewise, the patent discusses the multiplexed connection in the context of "data request[s]" or "data transfers"—not "messages." *See, e.g.*, '029 patent at 28:32–36. Moreover, given the specification's teaching that the multiplexed connection "can be used to transport all of the application traffic during an established *activity session*," *id.* at 30:30–35, construing the term to reference "multiple applications" rather than "two or more applications" better harmonizes the "multiplexed connection" with the "activity session" limitation, which as explained below, also merits a construction involving "multiple mobile application use."

Finally, SEVEN's criticism that "[n]othing in the patent requires the established multiplexed connection to be used to send transmissions from multiple applications" is a strawman. SEVEN Op. Br. at 36. Apple's construction does not require that; it permits the possibility that the established multiplexed connection is used to *receive* data. It invokes the word "transmission" simply to capture the notion that the connection transmits data in one direction or the other without limiting the actor that is responsible for transmission.

3. *"activity session" (claims 1 and 12)*

SEVEN	APPLE
Plain and ordinary meaning	"pattern of multiple mobile application use by a mobile user that can be 'predicted' by using contextual clues available to a mobile client proxy"

"When the patentee acts as its own lexicographer, that definition governs." *Cont'l Circuits LLC v. Intel Corp.*, 915 F.3d 788, 796 (Fed. Cir. 2019). The patentee may do so by "'clearly set[ting] forth a definition of the disputed claim term' other than its plain and ordinary

meaning." *Id.* SEVEN chose to do so with respect to the "activity session" term by defining it

in the third full paragraph of the 61/408,839 provisional application ("'839 Prov. App."), and

incorporating that provisional application by reference into the '029 specification:

> As will be described, in some embodiments the present invention is directed to a method for augmenting a distributed proxy-based solution by introducing the concept of an "activity session". An activity session is a pattern of multiple mobile application use by a mobile user that can be "predicted" by using contextual clues available to a mobile client proxy. Based on the prediction, a multiplex connection can be created and pre-caching of content can be performed to support the data activity during the session, thus minimizing the signaling overhead as well as the multiplexed transaction duration. In some embodiments this approach will also provide the additional benefit of an improved user experience (e.g., by reducing a perceived latency).

Ex. 18 ('839 Prov. App.) at SEVEN_APPLE-000010062. At no point in the remainder of the

'029 specification did SEVEN rescind this definition, offer a different definition, or even qualify

that this definition applies only to certain embodiments (rendering *MasterObjects, Inc. v. Yahoo!,*

Inc. inapposite). Instead, as is plain from the reproduced text above, SEVEN explained that

some of the embodiments of "the invention"—which presumably could encompass any

subsequent application claiming priority to this application—are directed at an "activity session."

And for those embodiments that involve an "activity session"—such as the '029 patent claimed

invention—an "activity session" is "a pattern of multiple mobile application use by a mobile user

that can be 'predicted' by using contextual clues available to a mobile client proxy."

The public was particularly entitled to rely upon this definition because "activity session"

is not an accepted technical term of art and was coined by SEVEN in 2010—the alleged priority

date. Eight years later, SEVEN wrote claims involving this "activity session" and now argues

that it has a different meaning. Ex. PP to SEVEN Op. Br. SEVEN's decade-later attempt to

distance itself from this definition falls flat. *Lear Siegler, Inc. v. Aeroquip Corp.*, 733 F.2d 881,

889 (Fed. Cir. 1984) ("[A]n inventor is permitted to define the terms of his claims. Nevertheless, the place to do so is in the specification of the inventor's application, and the time to do so is prior to that application acquiring its own independent life as a technical disclosure through its issuance as a United States patent.") (internal citation omitted)). Specifically, SEVEN argues that the "'839 application uses 'activity session' to refer to past (not predicted) user activity," and contradicts Apple's proposed construction that requires "an activity session to be something that can be <u>predicted</u>." SEVEN Op. Br. at 38. This is false. The defined "activity session" in the '839 provisional application is a time-independent "pattern" that also **could** be predicted.

SEVEN also incorrectly argues the '029 patent's disclosure that an "activity session" can be predicted by a server is incompatible with Apple's construction, presumably because it states that the "activity session" can be predicted by "contextual clues available to a mobile client proxy." *Id.* Not so. Apple's construction does not exclude that "contextual clues available to a mobile client proxy" are also available to a server. Moreover, even if a conflict existed, SEVEN should be bound by its definition.

> 4. *"wherein the data is fetched if the fetching is enabled by the user selection for the application" (claims 1 and 12)*

SEVEN	APPLE
Not indefinite	Indefinite

The '029 patent's claims require (1) "receiving a selection from a user whether to enable an application for fetching," (2) "fetching data for the application . . .," and (3) the requirement that "wherein the data is fetched if the fetching is enabled by the user selection . . ." Despite the references in limitations (1) and (3) regarding the "enabl[ing]" of fetching, limitation (2) places no qualification on the circumstances under which data is fetched. Rather, limitation (2) simply demands "fetching data." This leaves the person of ordinary skill in the art unsure of the scope of the claim as to the redundant limitation that "data is fetched if the fetching is enabled." *See*

32

Porter Decl. (Dkt. 97-30) ¶¶ 114–125. That limitation introduces redundancy: if data is already

fetched, what does it mean to additionally fetch data if fetching is enabled?

"[A] patent is invalid for indefiniteness if its claims, read in light of the specification

delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those

skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572

U.S. 898, 901 (2014) (abrogating prior standard that claim is definite so long as it is merely

"'amenable to construction,' and the claim, as construed, is not 'insolubly ambiguous'"). The

definiteness requirement requires claims "particularly pointing out and distinctly claiming the

subject matter which the inventor regards as the invention." 35 U.S.C. § 112.

That policy rings particularly true here, where the claims were drafted not at the time of

filing, but years later, and only ***after*** Apple introduced its accused products. *See Nautilus*, 572

U.S. at 911 ("[T]he definiteness inquiry trains on the understanding of a skilled artisan at the

time of the patent application, not that of a court viewing matters *post hoc*."). Heightening the

problem, the claimed concept—"fetching data" contingent on whether fetching is enabled for a

particular application—simply finds no support in either the '029 patent or its prosecution

history, leaving a skilled artisan with no guidance as to its scope. *See, e.g.*, Ex. 11 (Goodrich

Dep. Tr.) at 140:3–143:9 (struggling to identify a teaching in the specification as to "this notion

of enabling fetching").

SEVEN points to Dr. Porter's observation that the claims could have been rewritten in a

simpler way, and in so doing, would encompass a system in which fetching occurs only if

fetching is enabled. But the fact that the claims could be written to fix the plain claim language

is exactly ***why*** the patent is indefinite. SEVEN states in only one conclusory sentence that the

step of "fetching data" is contingent "upon a user selection enabling fetching." However,

33

nothing in the claims state that "fetching data" depends upon whether a user has enabled the fetching. To the contrary, both claims 1 and 12 recite the step of "fetching data" without qualification. SEVEN is not at liberty to rewrite the claims at this juncture. *See Chef Am., Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371, 1374 (Fed. Cir. 2004) ("[W]e construe the claim as written, not as the patentees wish they had written it").

Moreover, contrary to SEVEN's citations, not even SEVEN's expert Dr. Goodrich offered a justification for this interpretation. His declaration provides only the conclusory statement that the expert disagrees with Apple's contention that the term is indefinite and that that a person of skill would understand that certain terms in the claim "refer back to earlier recited elements in the claim." Goodrich Decl. (Dkt. 97-57) ¶ 140. Dr. Goodrich's deposition testimony was just as conclusory. *See* Ex. 11 (Goodrich Dep. Tr.) at 139:19–143:9. Dr. Goodrich never explained that the "fetching data" step is in any way contingent on user selection enabling fetching. Rather, he at best said that the step "relates back."[11]

J.   U.S. Patent No. 10,091,734 ("the '734 patent")

The '734 patent claims a mobile device that is configured to enter a power save mode that, when the device is in the power save mode, blocks transmission of outgoing application data requests for more than one application. The parties dispute the meaning of "block."

1.   "block" (claims 1, 6, and 9)

SEVEN	APPLE
"prevent/preventing/prevented"	Plain and ordinary meaning

SEVEN erroneously contends "block" should be construed as "prevent," based entirely on the Court's construction in a prior case. But SEVEN fails to explain why a prior construction

---

[11] SEVEN's argument relating to Apple's IPR petition is incorrect because as a statutory matter, indefiniteness challenges cannot be raised in the context of an IPR. 35 U.S.C. § 311(b).

of the term in a different patent asserted in a different case is appropriate here. Although the

'734 patent is related to U.S. Patent No. 9,156,129, the patents are not identical, and it does not

follow that the term "block" must be construed identically for at least two reasons.

First, SEVEN's proposed construction needlessly risks undermining the sound reasoning

underlying the Court's previous construction, i.e., that "blocking" an outgoing application data

request does not encompass preventing the creation of outgoing application data requests. *See*

Google Markman Order at 39 ("To the extent that Plaintiff is proposing that a device can 'block'

'outgoing application data requests' by preventing the ***creation*** of such requests, such an

interpretation would read out the recital that there must be 'outgoing application data

requests.'"). That is, SEVEN's proposal could confuse the jury into believing an application

data request can be merely "prevented" from existing in the first place, contradicting the plain

claim language that a data request is "blocked" and therefore must exist in the first place.

Second, because the last limitation of the '734 patent's independent claims requires that

"application data requests occurring while the mobile device is not in the power save mode are

blocked by user selection on an application-by-application basis," SEVEN's proposed

construction would require that, in power save mode, application data requests that are already

"occurring" are somehow also "prevented." Thus, SEVEN's proposed "prevent" construction

injects unnecessary confusion into the claims.

K. U.S. Patent No. 10,110,534 ("the '534 patent")

The '534 patent has the same specification as the '550 patent, and thus, generally

describes a technique for synchronizing content at two different locations.

1. *"stored" (claims 1, 11)*

SEVEN	APPLE
plain and ordinary meaning, which is "placed or retained in a device"	plain and ordinary meaning, which is "placed or retained in a device for potential future use"[12]

The parties dispute whether the plain meaning of "stored" requires data be retained "for potential future use." Apple's proposal is correct. First, contemporaneous dictionary definitions of "stored" explain that the term requires data be available for future use. SEVEN embraces the same definitions on which Apple relies, but SEVEN omits key parts of those definitions. SEVEN Op. Br. at 4. The full definitions confirm that stored information is retained for future use. For example, the IEEE Dictionary defines "store" as "to place into a device *as in definition (A)*" or "to retain in a device *as in definition (A)*." Ex. S (IEEE Dict.) to SEVEN Op. Br. (text omitted by SEVEN emphasized). "Definition (A)" in turn reveals that the stored information is retained so that it can be subsequently retrieved. *Id.* ("(A) A device into which data can be placed, in which they can be retained, and *from which they can be retrieved*"). SEVEN also excerpts a definition from *Modern Dictionary of Electronics*, again omitting the full context. The full definition is "2. To introduce information into the device in (1) above," where "(1)" makes clear that data must be stored for future use. Ex. T (Modern Dict. of Elecs.) to SEVEN Op. Br. (defining "store" as "*1. To retain information in a device from which the information can later be withdrawn*"). The *Merriam-Webster* dictionary also supports Apple's construction both in a general context ("something that is stored or kept *for future use*") and in the computer context ("to place or leave in a location (as a warehouse, or library, or computer memory) *for preservation or later use or disposal*"). Ex. W (Merriam-Webster Dict.) to SEVEN Op. Br.

---

[12] SEVEN argues part of Apple's construction ("to leave or keep") is imprecise compared to "placed or retained." To reduce disputes, Apple adopts that part of SEVEN's construction, limiting the disputed issue to whether stored data must be available "for potential future use."

Second, the surrounding claim language shows that "stored" data is retained for future use. The claim states that the server receives queries to access "stored" data. *See, e.g.*, '534 Pat. at cl. 1 (claiming a "first message [that] comprises a data query that is transmitted from the first device for the latest version of the data stored at the second device"). In other words, the claims describe storing the data so that a device later can send a query for that stored data.

SEVEN's primary argument boils down to this: "Data can be stored on a device regardless of whether there is 'future use.'" SEVEN Op. Br. at 4–5. Apple agrees, and Apple's construction does not require that the stored data is actually used, only that it is stored *for* use in the future. To the extent Apple's proposal left any ambiguity, Apple has revised its construction to emphasize that data is only stored "for *potential* future use." SEVEN is further incorrect that Apple's construction would read out temporary storage. Apple's construction does not impose a time limit; temporarily storing information is still storing the information—and the declaration from Apple's IPR expert says nothing more. Using SEVEN's example of a smartphone taking a picture, image information is "stored" when a user takes a picture, regardless of whether the user ever views or posts the resulting photo. But image information is not "stored" on the phone when the user gets ready to take the picture and the image information momentarily passes through the phone's camera and displays on the phone's screen. SEVEN's interpretation of "stored" thus has no reasonable bounds, and the Court should adopt Apple's construction.

2. "message" (claims 1,11)

In an effort to narrow disputes, Apple is no longer seeking construction of "message."

3. "receiving/receive a second connection associated with the second device" (claims 1, 11)

SEVEN	APPLE
The claims require an order such that "receiving/receive a second connection associated with the second device" is after "generating/generate a second message for a second device…"	Plain and ordinary meaning, which is "receive a second connection, where that second connection is associated with the second device"

The Court should reject SEVEN's request to impose a particular sequence on the claims such that the "receiving/receive" steps must follow the "generating/generate" and "send" steps in the claims. "As a general rule, '[u]nless the steps of a method [claim] actually recite an order, the steps are not ordinarily construed to require one.'" *Mformation Techs., Inc. v. Research in Motion Ltd.*, 764 F.3d 1392, 1398 (Fed. Cir. 2014) (internal citation omitted). For example, where the claim recites that one step occurs "after" or "responsive" to a prior step (such as in the *Uniloc 2017* case that SEVEN cites and relies upon), courts have limited the steps to a claimed order. *Uniloc 2017 LLC v. Google LLC*, No. 2:18-CV-496-JRG-RSP, 2020 U.S. Dist. LEXIS 9405, at *100–02 (E.D. Tex. Jan. 20, 2020). Where there is no such requirement, express or implied, courts have refused to inject a sequence into claims.

On their face, the claims here do not require the specific ordering SEVEN contends. For example, an abbreviated and annotated version of claim 1 is below:

A server . . . whereby the server is operable to:

[1] receive a first connection associated with a first device;

[2] receive a first message from the first device over the first connection;

[3] generate a second message for a second device based on the first message from the first device;

[4] send the second message to the second device;

[5] receive a second connection associated with the second device, wherein the first connection includes a connection that is initiated by the first device, wherein the second connection includes a connection that is initiated by the second device;

38

'534 patent at cls. 1, 11 (similar).[13] Nevertheless, SEVEN contends that the fifth step, "receive a second connection associated with the second device," must occur after the third step ("generate . . .") and fourth step ("send . . ."). SEVEN Op. Br. at 5.

Apple agrees that the fourth step must occur after the third step, because the claimed server device cannot "send" the second message until it has "generate[d]" the second message. In contrast, while the fifth step *could* occur after fourth step, nothing in the claims or patent require or even suggest that sequence. The fifth step refers to the claimed server "receiving" a connection. '534 patent at cl. 1. In other words, the second device in the claim has already opened a connection with another device, and the limitation requires the server to receive that connection. That fifth step is independent of the third and fourth steps. Neither the third step nor the fourth step recite the use of that received connection in any way. The fourth step refers to data that is sent to the second device, but it does not require the server use the fifth step's "second connection" for sending that data.

SEVEN's reliance on *Wi-LAN, Inc. v. Apple Inc.* is also misplaced. *See* SEVEN Op. Br. at 6. There, the claim recited "computing means" that "produce modulated data symbols" and "means to combine the modulated data symbols" that were produced in the prior limitation. *Wi-LAN, Inc. v. Apple Inc.*, 811 F.3d 455, 462 (Fed. Cir. 2016). Ordering was necessary to practice the claims—modulated data symbols could not be combined until after they were produced. *Id.* ("The text of the claim thus requires producing randomized symbols and then combining those randomized symbols."). The Federal Circuit did not base its holding on the fact that one element rested on another for antecedent basis, as SEVEN suggests, and SEVEN cites no case from the

---

[13] Claim 1 is directed to an apparatus, *i.e.*, "[a] server that manages," whereas claim 11 is directed to "[a] method of operating a server." *See id.* at cls. 1, 11.

Federal Circuit supporting such a position. Thus, the claims should be afforded their plain and ordinary meaning in which the elements of the claims do not require a specific ordering.

L. "Processor" Terms: The '127, '056, '734, '550, '619, '914, '771, '476, '539, '029, and '986 Patents

The parties dispute whether numerous asserted claims that recite a "processor" that is configured to perform various claimed functions are subject to § 112(6).[14] These disputes arise primarily because SEVEN's asserted claims are drafted "in a format consistent with traditional means-plus-function claim limitations," by reciting high-level functions without any recitation of corresponding structure. *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1350 (Fed. Cir. 2015). A claim reciting a processor "defined only by the function that it performs" does not recite sufficient structure, and must be construed as a means-plus-function limitation. *St. Isidore Research, LLC v. Comerica Inc.*, No. 2:15-cv-1390-JRG-RSP, 2016 WL 4988246, at *14 (E.D. Tex. Sept. 19, 2016). The inquiry is not whether the word "processor" has a commonly understood definition, but rather whether the claims at issue and written description "detail the objectives and operations of the 'processor configured to . . .' term[] in a way that ***connotes structure sufficient*** to avoid the application of § 112, ¶ 6." *Id*.

> 1. *The claimed "processor configured for/configured to/operable to" is not sufficient structure to perform the claimed functions*

Each of the "processor" terms recite functionality without definite structure. The mere disclosure of a general-purpose processor is not sufficient structure. *See In re Katz Interactive Call Processing Patent Litig.*, 639 F.3d 1303, 1316 (Fed. Cir. 2011) (general-purpose computer insufficient structure for claims "involv[ing] specific functions that would need to be implemented by programming a general purpose computer to convert it into a special purpose

---

[14] *See* Dkt. 82-2 at terms. 1, 4, 7, 10. 11, 14, 20. 21, 23, 28, 31, 34, 39, 43

computer capable of performing those specified functions"). Indeed, to hold otherwise would permit any patentee to engage in pure functional claiming of software elements by simply reciting that a "processor" is "configured" or "operable" to perform those functions. In *Williamson*, the Federal Circuit held that courts should ***not*** permit such "proliferation of functional claiming untethered to § 112, para. 6." 792 F.3d at 1349.

Each of the "processor" terms recite high-level functions for which a "processor" is "configured to," "configured for," or "operable to" perform. For example, claim 11 of the '914 patent requires the processor be "configured for" (1) receiving a unique authentication token from a first device and a second device; (2) transferring to a content selection interface on the first device an indication of content available from a content provider; (3) transmitting selected content to the first device in response to a user selection of the content available from the content provider at the first device; and (4) automatically transmitting the selected content to the second device. '914 patent at cl. 11. The claimed "processor" is defined only by the above-described functions it performs. Nothing in the claim language suggests the "processor" is a particular, special-purpose processor programmed for such functions. Absent specific programming, a general-purpose processor is insufficient structure to perform these functions, such as accepting an authentication token, or receiving or sending content over a wired or wireless link. Wicker Decl. (Dkt. 97-26) ¶¶ 38–44. A POSITA would understand that the claims require at least a radio and antenna, which are not necessarily part of a general-purpose processor. *See id.*

As another example, claim 1 of the '029 patent requires that the processor be "configured for" (1) receiving a selection from a user; (2) communicating over a multiplexed connection; (3) predicting an activity session based on application access history; (4) fetching data for the application before the activity session; and (5) disconnecting from a second connection. '029

patent at cl. 1. Again, the claimed "processor" is defined only by functions it performs. Nothing in the claim language suggests the "processor" is a particular, special-purpose processor that is programmed with particular software instructions, and a general-purpose processor is not sufficient structure to perform these functions, such as receiving and transmitting data over a mobile network. *See* Porter Decl. (Dkt. 97-30) ¶¶ 25–31, 98–101. Again, additional structure, such as an antenna and modem, would be required to perform these functions. *See id.* This pattern—defining the processor only by the functions it performs—is true for each of the disputed "processor" terms. *See* Wicker Decl. (Dkt. 97-26) ¶¶ 56–61 ('986 patent), 97–103, 109–113 ('127 patent), 122–127, 164–169 ('619 patent); Houh Decl. (Dkt. 97-33) ¶¶ 93–98 ('476 and '771 patents); Porter Decl. (Dkt. 97-30) ¶¶ 36–43 ('539 patent), 57–60 ('550 patent), 73–76 ('056 patent), 130–132 ('734 patent).

The specifications for each of the patents confirm this understanding. Indeed, the specifications describe a "processor" as a generic hardware component. Some specifications describe a processor for conventional, general-purpose computers. *See, e.g.*, '029 patent at 42:6–16; '550 patent at 9:28–33; '539 patent at 29:66–30:5. Others state that the steps can be performed by "any machine capable of executing a set of instructions." *See* '734 patent at 46:53–62. The patentee, however, is obligated to delineate the structure with which to configure the processor because sufficiently definite structure is required to avoid application of § 112, ¶ 6. *See Diebold Nixdorf, Inc. v. ITC*, 899 F.3d 1291, 1298 (Fed. Cir. 2018) (citing *Williamson*, 792 F.3d at 1349). The patentee's failure to do so requires application of § 112(6).

SEVEN's reliance on patentees' statements regarding § 112(6), SEVEN Op. Br. at 43, and the independent knowledge of a POSITA regarding possible structure are legally irrelevant. An "inventor's subjective intent is irrelevant to the issue of claim construction." *Howmedica*

42

Osteonics Corp. v. Wright Med. Tech., Inc., 540 F.3d 1337, 1347 (Fed. Cir. 2008). Similarly, the interactions between the "processor" and the "other structural elements of the claims" fail because the alleged "interact[ion]" does not "inform the structural character of" the functional limitations. *Williamson*, 792 F.3d at 1351; *St. Isidore Research*, 2016 WL 4988246, at *14.

2. *The specifications do not disclose structure or algorithm for performing the claimed functions, rendering the "processor" terms indefinite*

Once the claim is construed under § 112(6), a two-step process takes over. First, the court identifies the claimed function. *Williamson*, 792 F.3d at 1351. Second, the court determines, "what structure, if any, disclosed in the specification corresponds to the claimed function." *Id.* "Where there are multiple claimed functions, as we have here, the patentee must disclose adequate corresponding structure to perform all of the claimed functions." *Id.* at 1351–52. If the specification does not disclose adequate corresponding structure, the claim is indefinite. *Id.* at 1352. Corresponding structure is adequate "if the intrinsic evidence clearly links or associates that structure to the function recited in the claim." *Id.* If the specification discloses that the claimed function is performed by a programmed general-purpose computer, "the specification must disclose an algorithm for performing the claimed function." *Id.*

As to step one, because each of the disputed "processor" terms invokes § 112(6), construing the terms first requires identifying the claimed function(s). Contrary to SEVEN's assertion, Apple has identified the functions that are subject to 112(6), each of which are enumerated in the parties Joint Claim Construction Statement. *E.g.*, Dkt. 82-2 at 1–2. SEVEN, in contrast, knowingly and deliberately chose not to identify the claimed functions—even as an

43

alternative argument. *See id.* at 1 n.1 ("SEVEN has chosen not to identify any functions or corresponding structures for any of these terms and has therefore waived the right to do so.").[15]

Step two requires identifying corresponding structure to perform the function. For the asserted "processor" terms, none of the patents' specifications discloses adequate structure, let alone clearly links it to the claimed functions. As such, each of these terms is indefinite. The '986 patent is illustrative. There, claims 1, 12, and 23 recite "a processor configured for" performing the functions of authenticating a first and second user device over a network; accessing or creating content in response to an application at the first device; and transmitting a representation of the accessed content to an application at an associated device. *See* '986 patent at cls. 1, 12, 23; Wicker Decl. (Dkt. 97-26) ¶¶ 57, 62. However, the specification does not disclose or clearly link any corresponding structure to one of the claimed functions. *See* Wicker Decl. (Dkt. 97-26) ¶¶ 63–69. For example, while the '986 patent discloses that the "personal computing device 130 may be configured to receive a unique authentication token from the mobile device 120," the specification does not disclose any structures of the processor (let alone any algorithms with which to program the processor) for receiving the authentication token, de-encrypting the authentication token, or storing the authentication token in a manner that identifies the user devices or associates it with other user devices. '986 patent at 11:13–15.

Claim 7 of the '539 patent supplies another example of the failure to disclose corresponding structure. Claim 7 recites "a processor configured for" performing the functions of querying a user by displaying a notification on a user interface of the mobile device to select whether to enter a power save mode; upon selection by a user of entering the power save mode

---

[15] SEVEN's arguments concerning the timeliness of Apple's disclosure of its indefiniteness positions on the "processor" terms are incorrect as described in Apple's briefing on its pending Motion to Supplement its Invalidity Contentions. Dkt. Nos. 81, 88.

for the mobile device, optimizing traffic at the mobile device by blocking transmission of at least some traffic from the mobile device. *See* '539 patent at cl. 7; Porter Decl. (Dkt. 97-30) ¶ 37. Again, the specification does not disclose or clearly link any corresponding structure to the claimed functions. *See* Porter Decl. (Dkt. 97-30) ¶¶ 38–43. For example, the '539 patent specification never mentions the term "block" (other than block diagrams) or blocking transmission, let alone an algorithm for blocking transmission. *See id.* The failure to disclose the necessary corresponding structure for performing each of the claimed functions afflicts each of the "processor" terms. *See* Wicker Decl. (Dkt. 97-26) ¶¶ 45–55 ('914 patent), 103–108 ('127 patent), 128–138 ('619 patent); Houh Decl. (Dkt. 97-33) ¶¶ 99–117 ('476 and '771 pat.); Porter Decl. (Dkt. 97-30) ¶¶ 61–67 ('550 patent), 77–84 ('056 patent), 102–109 ('029 patent), 133–138 ('734 patent). "Simply disclosing a black box that performs the recited function is not a sufficient explanation of the algorithm required to render the means-plus-function term definite." *Augme Techs., Inc. v. Yahoo! Inc.*, 755 F.3d 1326, 1338 (Fed. Cir. 2014). Accordingly, the asserted "processor" terms are indefinite.

Critically, SEVEN chose to omit proposed structure from its claim construction disclosures and in its expert's declarations (Dkt. 82-2 at 1 n.1), admitting in its brief that its failure was deliberate. SEVEN Op. Br. at 45. Thus, should the Court agree that § 112(6) applies to these terms, SEVEN has conceded their indefiniteness. SEVEN's suggestion that the Court should allow it supplemental briefing to address the issue later ignores, at its own peril, the Court's patent rules governing the timing for claim construction disclosures. *SEVEN Networks, LLC v. Google LLC*, No. 2:17-cv-00442-JRG, Dkt. No. 224 (E.D. Tex. July 11, 2018). SEVEN provides no good cause for such an extraordinary departure from the Court's procedures—and the Court should reject SEVEN's request.

45

Date: February 18, 2020   By: Respectfully submitted,

/s/ Noah C. Graubart
Ruffin Cordell (Lead Counsel)
cordell@fr.com
Texas Bar Number 04820550
Indranil Mukerji
mukerji@fr.com
Massachusetts Bar Number 644059
FISH & RICHARDSON P.C.
1000 Maine Ave SW, Suite 1000
Washington, DC 20024
Telephone: 202-783-5070
Facsimile: 202-783-2331

Benjamin C. Elacqua
Texas Bar Number 24055443
elacqua@fr.com
John P. Brinkmann
Texas Bar Number 24068091
brinkmann@fr.com
Kathryn Quisenberry
Texas Bar Number 24105639
quisenberry@fr.com
FISH & RICHARDSON P.C.
1221 McKinney Street, Suite 2800
Houston, TX 77010
Telephone: 713-654-5300
Facsimile: 713-652-0109

Betty Chen
Texas Bar Number 24056720
bchen@fr.com
Katherine D. Prescott
California Bar Number 215496
prescott@fr.com
FISH & RICHARDSON P.C.
500 Arguello Street, Suite 500
Redwood City, CA 94063
Telephone: 650-839-5070
Facsimile: 650-839-5071

46

Noah C. Graubart
Georgia Bar Number 141862
graubart@fr.com
FISH & RICHARDSON P.C.
1180 Peachtree Street, NE, 21st Floor
Atlanta, GA 30309
Telephone: 404-582-5005
Facsimile: 404-582-5002

Melissa Smith
Texas Bar Number 24001351
melissa@gillamsmithlaw.com
GILLAM & SMITH, LLP
303 South Washington Avenue
Marshall, Texas 75670
Telephone: 903-934-8450
Facsimile: 903-934-9257

COUNSEL FOR DEFENDANT APPLE INC.

47

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the above and foregoing

document has been served on February 18, 2020 to all counsel of record who are deemed to have

consented to electronic service via the Court's CM/ECF system per Local Rule CV-5(a)(3).

/s/ Evelyn McNaspy
Evelyn McNaspy